QuickSpecs

Overview

HPE H240ar Smart Host Bus Adapter

The HPE H240ar Smart Host Bus Adapter is a 2 x4 internal ports flexible Smart HBA which provide customers with the flexibility and speed they have come to expect from HPE. The H240ar Smart HBA is ideal for internal connectivity to HDDs and SSDs that provides support for 12G SAS and 6G SATA drives. H240ar Smart HBA can also provide high performance for SSDs that do not require data protection. This SAS HBA is ideal for driving cost-effective and reliable scalability in today's data centers. The HPE H240ar can scale internal storage in the servers with the addition of HPE 12G SAS Expander card. The H240ar Smart Host Bus Adapter provides flexibility to run in HBA mode or simple RAID mode. When operating in simple RAID mode, it provides RAID 0, RAID 1, and RAID 5 with optional HPE Secure Encryption capabilities. Unlike the HPE Smart Array Controllers, the H240ar does not support cache modules for acceleration.



Model Host Bus Adapter HPE H240a

apter HPE H240ar 12Gb 2-ports Int Smart Host Bus Adapter

726757-B21

Kit contents

• Flexible HPE H240ar Smart Host Bus Adapter



Standard Features

Key Features	 Storage interface (SAS/SATA) 8 physical links across 2 x4 internal ports 12Gb/s SAS, 6Gb/s SATA technology Mix-and-match SAS and SATA drives to the same controller Support for SAS tape drives, SAS tape autoloaders and SAS tape libraries PCI Express Gen3 x8 link RAID 0, 1, 5, 10 Simple RAID or HBA mode Legacy and UEFI boot operation Up to 200 physical drives HPE Secure Encryption (optional license) Seamless upgrades to other HPE Smart Array P-series controllers Flexible Smart HBA (Daughter Card) Dimensions: 5.3 x 3.56 x 1.23 in (13.46 x 9.04 x 3.12 cm) 			
Ports	Internal: 8 SAS/SATA physical links across 2 x4 internal ports			
Performance	 12Gb/s SAS (1200 MB/s theoretical bandwidth per physical lane) 6Gb/s SATA (600 MB/s theoretical bandwidth per physical lane) PCI Express Gen3 x8 link width 			
HPE Secure Encryption	HPE Secure Encryption is a Smart Array controller-based data encryption solution for ProLiant Gen9 servers that protects sensitive, mission critical data. This is an enterprise-class encryption solution for data at rest on any bulk storage attached to the HPE Smart Array controllers including data on the cache memory of the controller. HPE Secure Encryption is an optional license per server requiring encryption enablement (see Related Options for more information on the license).			
	The solution is available for both local and remote key management mode deployments. Local Key Management Mode is focused on single server deployment where there is one Master key per controller that is managed by the user. Remote Key Management Mode is for enterprise wide deployments from just a few servers to thousands of servers.			
	For more information please visit http://www.hpe.com/servers/secureencryption			
Warranty	The warranty for this device is 1 year parts only. Warranty Upgrade Options			
	 Response - Upgrade on-site response from next business day to same day 4 hours Coverage - Extend hours of coverage from 9 hours x 5 days to 24 hours x 7 days Duration - Select duration of coverage for a period of 1, 3, or 5 years Warranty upgrade options can come in the form of Care Packs, which are sold at the HPE System level this product attaches too 			

Compatibility

Server Support	HPE ProLiant DL360 Gen9 HPE ProLiant DL380 Gen9		
	HPE ProLiant ML350 Gen9		
Operating Systems	Microsoft Windows Server		
	Microsoft Windows Hyper-V Server		
	VMware vSphere ESXi		
	Red Hat Enterprise Linux (RHEL)		
	SUSE Linux Enterprise Server (SLES)		
	Oracle Solaris		
	Oracle Linux		
	Canonical Ubuntu		
	CentOS		
	Wind River		
	Citrix XenServer		
	NOTE: For a complete and up-to-date list of certified and supported OS versions for HPE Smart		
	Array controllers, please refer to the HPE Smart Array Operating System Support Matrix at:		
	http://www.hpe.com/h20195/v2/GetPDF.aspx/4AA6-6550ENW.pdf		
	NOTE: For more information on HPE's Certified and Supported ProLiant Servers for OS and Virtualization Software, please visit our Support Matrix at: <u>http://www.hpe.com/info/ossupport</u>		
Storage Management Software Suite	HPE Smart Storage Administrator (HPE SSA) Comprehensive management for HPE Smart Storage products with advanced scripting and diagnostic features and simplified and intuitive interface and functionality. For more information please visit: <u>http://www.hpe.com/servers/ssa</u>		
	HPE Systems Insight Manager Powerful server and server options/storage manager tool with configuration/diagnostic utilities HPE Storage Management Utility Offers the simplest method for configuring the storage system via Initial System Configuration Wizard		
	Oners me simplest method for configuring me storage system via filmar system configuration wizard		

Service and Support

HPE Support Services	s Protect your business beyond warranty with HPE Support Services HPE Pointnext provides a comprehensive portfolio including Advisory and Transformational, Professional, and Operational Services to help accelerate your digital transformation. From the onset of your transformation journey, Advisory and Transformational Services focus on designing the transformation and creating a solution roadmap. Professional Services specializes in creative configurations with flawless and on-time implementation, and on-budget execution. Finally, operational services provides innovative new approaches like Flexible Capacity and Datacenter Care, to keep your business at peak performance. HPE is ready to bring together all the pieces of the puzzle for you, with ar eye on the future, and make the complex simple.			
Recommended Support	HPE Proactive Care* with 24x7 coverage, three year Support Service HPE Proactive Care gives customers an enhanced call experience. When your products are connected to HPE, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This Service combines three years proactive reporting and advice with our 24x7 coverage, four hour hardware response time when there is a problem. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.) running on your HPE servers. https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf			
	HPE Proactive Care* with 6 hour call-to-repair commitment, three year Support Service HPE Proactive Care gives customers an enhanced call experience. When your products are connected to HPE, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This Service combines three years' proactive reporting and advice with our highest level of hardware support - HPE's 24x7, six hour hardware call-to- repair. HPE is the only leading manufacturer who makes this level of coverage available as a standard service offering for your most valuable servers. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.) running on your HPE servers. https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf			
	*HPE Proactive Care and HPE Proactive Care Advanced require that the customer connect their devices to make the most of these services and receive all the deliverables.			
HPE Education Services	Keep your IT staff trained making sure they have the right skills to deliver on your business outcomes. Book on a class today and learn how to get the most from your technology investment. <u>http://www.hpe.com/ww/learn</u>			
HPE Support Center	The HPE Support Center is a personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with HPE experts, access support resources or collaborate with peers.			
	Learn more http://www.hpe.com/support/hpesc			
	HPE's Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime. HPE Insight Remote Support and HPE Support Center are available at no additional cost with a HPE warranty, HPE Support Service or HPE contractual support agreement.			
	*HPE Support Center Mobile App is subject to local availability			
Parts and materials	HPE will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended			

Service and Support

engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Related Services HPE Server Hardware Installation

Provides for the basic hardware installation of HPE branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner. https://www.hpe.com/h20195/V2/GetPDF.aspx/5981-9356EN.pdf

HPE Installation and Startup Service provides for the installation and startup of HPE technology including BladeSystems, C-Class enclosure, HPE ProLiant c-Class and Integrity server blades, storage blades, SAN switch blades, HPE Virtual Connect modules (Ethernet and Fibre Channel), Ethernet network interconnects, and InfiniBand, as well as the installation of one supported operating system type (Windows® or Linux).

NOTE: The Smart Array P408i-a SR Gen10 Controller is covered under the HPE Service Contract applied to the HPE ProLiant Server. No separate HPE support services need to be purchased.

Warranty and Support Services will extend to include HPE options configured with your server
or storage device. The price of support service is not impacted by configuration details. HPE
sourced options that are compatible with your product will be covered under your server
support at the same level of coverage allowing you to upgrade freely. Installation for HPE
options is available as needed. To keep support costs low for everyone, some high value options
will require additional support. Additional support is only required on select high value workload
accelerators, fibre switches, InfiniBand and UPS batteries over 12KVA. See the specific high
value options that require additional support HERE.

Recommended and Recommended

Extended Products Offering the best combination of performance, value and availability, Recommended Options have been selected by HPE experts to provide the right technology for a range of workloads and market segments. Fully integrated into the ProLiant management and security experience, Recommended Options provide the best fit with timely availability.

Extended

Extended Options provide an extended catalog of products tailored for customers in specific markets or with specific workloads, requiring the utmost in performance or value. Fully integrated into the ProLiant management and security experience, Extended Options represent great value and performance but typically have a longer lead-time.

This controller is an Extended Option.

Additional Service <u>http://www.hpe.com/services</u> Information

Q2F26AAE

Related Options HPE Smart Array Secure Encryption/Data at Rest Encryption/per Server Entitlement E-HPE Smart Array SR **Secure Encryption** LTU NOTE: HPE Smart Array SR Secure Encryption licensing is based on the number of servers requiring encryption for direct attached storage. NOTE: For more information visit: http://www.hpe.com/servers/secureencryption **HPE Cable Options** For a list of SAS cables for this controller, please refer to the HPE Smart Storage Cables compatibility matrix. https://www.hpe.com/h20195/V2/GetDocument.aspx?docname=4AA5-4154ENW&cc=us&lc=en **Environment friendly** Hewlett Packard Enterprise offers end-of-life product return, trade-in, and recycling programs, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be **Products and** recycled, recovered or disposed of in a responsible manner. Approach - End-of life

Management and The EU WEEE Directive (2012/19/EU) requires manufacturers to provide treatment information for Recycling each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Summary of Changes

Date	Version History	Action	Description of Change
5-Feb-2018	Version 5	Changed	Replaced Secure Encryption SKU (C9A82AAE) with Q2F26AAE. Updated Service and Support.
23-Oct-2017	Version 4	Changed	Care Pack naming and Service and Support- Parts and Materials updated.
19-Aug-2016	Version 3	Changed	Overview, Standard Features, Compatibility, and Related options were revised.
28-Sep-2015	Version 2	Removed	Solaris references were removed from the QuickSpecs.
09-Sep-2014	Version 1	New	Initial version



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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

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